

locality, which I have received from Mr. Ronald Gunn, proves most decidedly, what I had long suspected, that they are very different species, and they may be characterized as follows :

Trigonia margaritacea, Lam. Syst. Anim. sans Vertèb.—Shell rather compressed, with 20 or 23 rather narrow nodulose radiating ribs; the hinder ribs very compressed, all excepting the front ribs wide apart. Hab. Van Diemen's Land. Ronald Gunn, Esq.

Trigonia Lamarckii, Gray.—Shell rather ventricose, solid, with 20 to 26 narrow flat-topped nodulose radiating ribs; the ribs of the hinder slope, narrow, rather crowded; convex, ribs all close together and nodulose. Hab. New Holland, Port Jackson. Mr. Stutchbury.

Varies with the inside white, salmon-coloured, yellow, or purple bronze.

The young states of these two species are so very different that it is astonishing they could have ever been confounded; the Van Diemen's Land species in all its stages of growth is about twice as large as that from New Holland.—J. E. GRAY.

THE SEXES OF LIMPETS. PATELLE.

The *Patellæ* have generally been considered as hermaphrodite, but this is certainly not the case, as I have remarked several years ago. But notwithstanding repeated examinations, however, I have not been able to discover any external difference in the animal, except a slight variation in colour, nor is there any difference in the size and form of the shells. In the autumn they are easily distinguished if an incision be made along the right side of the foot, when the males exhibit a white milky glairy fluid; and the females, which before they are cut generally have a darker foot, a great quantity of round eggs (the size and appearance differing according to their state of development) swimming in a transparent viscid fluid. This cannot be the two states of the same fluid, for after examining hundreds of specimens, of different sizes and at various seasons, I have never been able to find them in any intermediate state, although I have found the egg in various stages of development. In their early state they are dark and opaque, but in the later they become more transparent. I have never been so fortunate as to find the fœtal state of the animal, showing the primitive form of the shell; but this state may often be seen attached to the tip of the young specimens.

The larger limpets often form on the chalk, cavities the size of their shell, as I have noticed in my paper on the structure of shells, in the Philosophical Transactions for 1833.—J. E. GRAY.